APPENDIX

CONTENTS

1. RC Technical Information 1
2. RC Trouble Shooting Guide 8
3. Service Call Explanations & Checks 38
4. RC Master Disposal System Trouble Shooting 47

Section 3
Troubleshooting Section

RC TECHNICAL INFORMATION

EPROM COMPATIBILITY

RC 4500/5600/5600D

PANEL / SYSTEM	PP11/ V.5.01	PP11/ V.5.02	PP11/ V.5.03	PP11/ V.5.04	PP11/ V5.06	PP11/ V.5.07	PP11/ V5.08
SP 5.01–SP11G/5.03	#	#	#	X	X	X	X
SP11/V1.17–SP11/V1.21	#	#	#	X	X	X	X
SP11G/5.04	#	#	#	X	X	X	X
SP11/V1.26	X	X	X	$	$	$	$
SP11G/5.06	X	X	X	$	$	$	$
SP11G/5.12–SP11G/V5.16	X	X	X	$	$	$	$
SP11G/5.17	X	X	X	$	$	$	@
SP11G/7.01	X	X	X	X	X	X	@

– CURRENT VERSION

@ – STAND ALONE / RC SORTER / WITH CI
# – STAND ALONE ONLY
$ – STAND ALONE / WITH RC SORTER
X – NOT COMPATIBLE

RC 4000

PANEL / SYSTEM	PP11/V5.03– PP11/V5.07	PP11/V5.08
SP11G/V5.03	X	X
SP11G/V5.04	X	X
SP11G/V5.06	X	X
SP11G/V5.12–SP11G/V5.16	X	$
SP11G/V5.17	X	$
SP11G/V7.01	X	$

RC 5800

PANEL / SYSTEM	SP22/ V5.00	SP22/ V5.03
SP22/V1.06	$	$
SP22/V1.07	$	$
SP22/V1.13	$	$
SP22/V3.01	X	@

– CURRENT VERSION

@ – STAND ALONE / RC SORTER / WITH CI
# – STAND ALONE ONLY
$ – STAND ALONE / WITH RC SORTER
X – NOT COMPATIBLE

RC TECHNICAL INFORMATION

SUBJECT: ROM VERSIONS AT TIME OF SHIPMENT

MODEL	ROM [PANEL]	VERSION [SYSTEM]	SERIAL NUMBER [CUT-IN]
RC4000	PP11/V5.08	SP11G/V5.12	94410002 - 94410012
	PP11/V5.08	SP11G/V5.14	94410013 - 94410062
	PP11/V5.08	SP11G/V5.16	94410063 - 94410279
RC4500	PP11/V5.03	SP11/V1.18	91500001 - 91500300
	PP11/V5.03	SP11/V1.17	91500301 - 91500437
	PP11/V5.03	SP11/V1.18	91500438 - 91500649
	PP11/V5.03	SP11/V1.21	91500650 - 91500804
	PP11/V5.03	SP11/V1.18	91500805 - 91500878
	PP11/V5.03	SP11/V5.02	91500879 - 91502232
	PP11/V5.03	SP11/V5.03	91502233 - 91504300
	PP11/V5.03	SP11/V5.03	91510001 - 91514227
	PP11/V5.08	SP11G/V5.14	91514228 - 91514424
	PP11/V5.08	SP11G/V5.15	91514425 - 91514452
	PP11/V5.08	SP11G/V5.16	91514453 - 91514599
RC5600	PP11/V5.02	SP11/V5.01	91400001 - 91400010
	PP11/V5.03	SP11/V1.17	91400011 - 91400040
	PP11/V5.03	SP11/V1.18	91410001 - 91410450
	PP11/V5.03	SP11/V5.02	91410451 - 91410720
	PP11/V5.03	SP11/V5.03	91410721 - 91411830
	PP11/V5.03	SP11/V5.03	91420001 - 91420777
	PP11/V5.08	SP11G/V5.14	91420778 - 91420848
	PP11/V5.08	SP11G/V5.15	91420849 - 91420858
	PP11/V5.08	SP11G/V5.16	91420859 - 91420923
RC5600D	PP11/V5.01	SP11/V5.01	91440001 - 91440010
RC5800	PP22/V5.00	SP22/V1.06	92450003 - 92450027
	PP22/V5.00	SP22/V1.07	92450028 - 92451205

NOTE: **THERE MAY BE A FEW OTHER INSTANCES WHERE ROM CONFIGURATIONS, AS LISTED ABOVE, DO NOT MATCH YOUR SYSTEM. SOME MACHINES IN THE FIELD MAY DIFFER, DUE TO ROM REPLACEMENT, eg, PERIPERAL DEVICE CONFIGURATIONS. (RC SORTER, COMPUTER INTERFACE, MAIN MOTOR SPEED ENHANCEMENT; SP11G/V5.17, P/N 011-88517. REF. TIB #83, DATED 5/26/92.)**

RC4000 / 4500 / 5600 / 5600D SYSTEM MAIN ROM

ROM VERSION NUMBER

CURRENT	REVISED TO	DESCRIPTION OF CHANGE
SP11/V5.02	SP11/V5.03	CORRECTED IMPROVED IMAGE PROCESSING FUNCTION
SP11/V5.03	SP11G/V5.06	ADDED CONTROL PROGRAM FOR RC SORTER
SP11G/V5.06	SP11G/V5.12	ADDED FINE CONTROL ON ELEVATOR UNIT
		CORRECTED "DISPLAY LOCKUP WHEN PULL PAPER FROM THE ELEVATOR IMMEDIATELY AFTER PRINT START" FUNCTION
		MODIFIED MAIN MOTOR STARTING TIME (400ms - 800ms) AFTER CLAMP MOTION DURING MASTER DISPOSAL
		CORRECTED "DISPLAY LOCKUP IF REMAIN PAPER COUNTER WAS MULTIPLE NUMBER OF 256 WHEN CHANGING MODE OF RC SORTER TO NON-SORT MODE FROM SORT MODE
		MODIFIED MAIN MOTOR SPEED (30RPMs - 15RPMs) DURING MASTER DISPOSAL
		MODIFIED RC SORTER OPERATE IN I/F MODE INTERFACE FUNCTION, CORRECTED ORIGINAL OVERSIZED COUNTER DETECT ERROR (14331 PULSES - 20252 PULSES)
		MODIFIED ACTION OF ELEVATOR UNIT MODIFIED FUNCTION OF TEST MODE 70
SP11G/V5.12	SP11G/V5.1	MODIFIED IMAGE POSITION FOR RC4000
SP11G/V5.14	SP11G/V5.15	CORRECTED FOR T2 TO BE DISPLAYED WHEN NEEDED
SP11G/V5.15	SP11G/V5.16	CORRECTED ELEVATOR LOCKUP WHEN PULL PAPER OUT DURING PRINT FUNCTION
SP11G/V5.16	SP11G/V5.17	CORRESPONDS WITH RC/CI INTERFACE FOR RC4500/5600/5600D
		MODIFIED MAIN MOTOR SPEED (30RPMs - 15RPMs) DURING TEST MODE FUNCTIONS #81, 82 AND 83

RC4000 / 4500 / 5600 / 5600D OPERATION PANEL ROM

ROM VERSION NUMBER

CURRENT	REVISED TO	DESCRIPTION OF CHANGE
PP11/V5.03 - PP11/V5.04 (V5.06 and V5.07)		MODIFIED TO CORRESPOND WITH RC SORTER
PP11/V5.07 - PP11/V5.08		CORRECTED FOR DISPLAY LOCKUPS WHEN EXECUTING TEST PRINTS DURING A PROGRAM PRINT FUNCTION
		MODIFIED TO CORRESPOND WITH RC4000
		MODIFIED INTERFACE FUNCTION FOR RC / CI

RC5800 SYSTEM MAIN ROM

SP22/V1.04 - SP22/V1.06		MODIFIED FUNCTION; SETTING TO "PRINT MODE" AT POWER UP
(V1.07)		MODIFIED FOR DISPLAY LOCKUPS, IF PAPER WAS PULLED OUT DURING PRINT OR TEST PRINT CYCLES.
SP22/V1.07 - SP22/V1.13		ADDED FINE CONTROL FUNCTION TO ELEVATOR UNIT
		CORRECTED FOR DISPLAY LOCKUPS IF PAPER WAS PULLED OUT IMMEDIATELY AFTER START OF PRINT
		CORRECTED FOR DISPLAY LOCKUPS IF REMAINING PAPER COUNT WAS MULTIPLE OF 256 WHEN CHANGING RC SORTER MODES FROM SORT TO NON-SORT
		MODIFIED MAIN MOTOR SPEED (30rpm - 15rpm) DURING THE MASTER DISPOSAL PROCESS

RC5800 OPERATION PANEL ROM

SP22/V5.00 - SP22/V5.03		CORRECTED DISPLAY LOCKUPS IF MASTER JAM SENSOR DETECTS MASTER DURING: a.) POWER UP b.) AUTOMATIC IDLE

TIMING BELT REPLACEMENT

1. LOWER ELEVATOR TRAY
   CENTER VERTICAL POSITION
   HOME PRINT CYLINDER
   SHUT POWER OFF

2. LOCK DOWN CLAMP SOLENOID (wedge screwdriver)

3. REMOVE PRESSURE AND PAPER DISK
   *NOTE: Timing marks pressure disk-9:00 o'clock
   P disk-3:00 o'clock

4. REMOVE THE FACE PLATE IN TWO PIECES

5. REMOVE PRESSURE MOTOR (2 screws)

6. REMOVE PRESSURE LINKAGE AS A UNIT
   *NOTE: Spring and E Ring

7. REMOVE VERTICAL CENTERING SENSOR

8. REMOVE SECTOR GEAR
   a) Disconnect timing lever spring and carefully lower timing just below the gear guide roller.

   b) Turn E Ring to open end up (avoids obstruction)

   c) Remove large E Ring on sector gear and unhook spring and remove the sector gear.

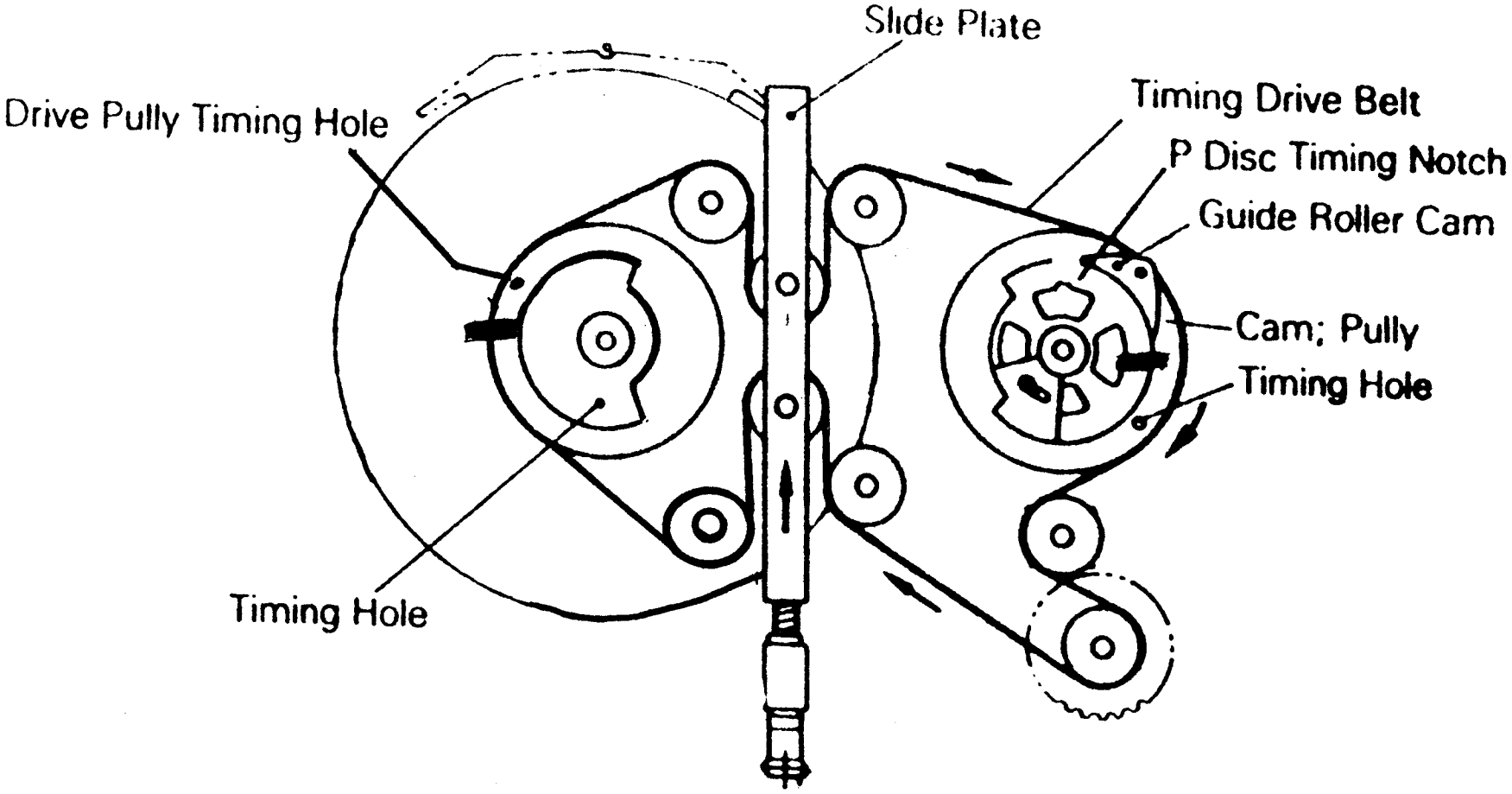
9. DISASSEMBLE FEED CLUTCH (3 screws)
   *NOTE: Just electro-magnet not whole clutch

10. LOOSEN BELT TENSION BY LOOSENING 3 SCREWS OF THE BRACKET ON THE FEED CLUTCH
    *NOTE: Timing hole on cam 4:00 o'clock

11. REMOVE REINFORCED PLATE
    *NOTE: Black screw on lower left. CAUTION: Collars on idler gears.

12. REMOVE BELT BY PASSING IT THROUGH CENTER OF SLIDE PLATE
    (left to right)

13. REASSEMBLE DRIVE UNIT IN REVERSE ORDER, BE SURE TO RETIME THE MACHINE AS YOU GO ALONG.


Slide Plate
Drive Pully Timing Hole
Timing Drive Belt
P Disc Timing Notch
Guide Roller Cam
Cam; Pully
Timing Hole
Timing Hole

REFERENCE CHART
FOR FEEDING/REGISTRATION PROBLEMS

I.	PRESSURE CAM HOLE	12:00O'CLOCK
II	TIMING CAM HOLE	4:00 O'CLOCK
III	PRESSURE DISC HOLE	9:00 O'CLOCK
IV	P DISC HOLE	3:00 O'CLOCK
V	DO ALL FOUR TABLE ADJUSTMENTS	
VI	CHECK TIMING AND GUIDE ROLLER ADJUSTM	3-5M/M
VII	CHECK PRESSURE ADJUSTMENTS	
VIII	ORIGINAL TRAVEL	
IX	MASTER POSITIONING SENSOR	
X	RUN MACHINE WITH FREE ROTATION BUTTON	
XI	CONFIDENTIAL ON/ SPEED AND PRINT POSITION MAX OUT AND RUN	